Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method for ~~providing a user interface for~~ controlling devices that are currently connected to a <u>physical layer of a</u> network, the method comprising the steps of:

> for at least one of said devices:
>
>> (a)   <u>discovering a plurality of devices that are currently connected to the network;</u>
>>
>> ~~(a)~~<u>(b)</u> obtaining information <u>for commanding and controlling at least one of the plurality of devices by at least one other device</u> ~~directly from one or more of the devices~~ currently connected to <u>physical layer of</u> the network, wherein ~~each device contains device~~ <u>the</u> information <u>includes</u> ~~including user control interface description for user interaction with that device~~<u>at least a device name and service type, and</u>
>>
>> <u>wherein the physical layer provides a communication medium that can be used by the plurality of devices to communicate with each other;</u>
>>
>> ~~(b)~~<u>(c)</u> ~~dynamically~~ generating a <u>user interface</u> ~~top page user interface description~~ based at least on the ~~directly~~ obtained ~~device~~ information, the <u>user</u>

interface ~~top page user interface description~~ including one or more references

associated with ~~the device information in~~ each of <u>the</u> ~~said~~ devices currently

connected to the network~~, such that each reference in the top page user interface~~

~~description includes at least one electronic link providing direct access from the~~

~~top page user interface description to said device information contained in said~~

~~devices currently connected to the network~~; and

~~(c)~~<u>(d)</u>   <u>displaying the generated user interface such that a user can</u> ~~when~~

~~one of the at least one electronic link in the top page user interface description is~~

~~selected by a user, using the selected link to access the associated device and use~~

~~the control interface description contained in the selected device to generate a~~

~~device user interface for user interaction with that selected device~~<u>use each</u>

<u>reference of the displayed user interface to access each device</u>.

Claim 2 (currently amended): The method of claim 1, wherein ~~one of the at least one~~

~~electronic link comprises a pointer from the top page user interface description to at least the~~

~~device information in an associated device, wherein when one of the at least one electronic link~~

~~in the top page user interface is selected by the user, the pointer directs the user to the URL that~~

~~is linked to the associated device~~<u>the service type comprises a type of service that each device can</u>

<u>provide and the user control interface is generated and displayed based on at least an attribute and</u>

<u>capability of the service type</u>.

Claim 3 (currently amended): The method of claim 1, wherein ~~the step (b) further includes the steps of generating the top page user interface description such that~~ the user interface ~~description~~ further includes device data corresponding to each device based on the information obtained from each device.

Claim 4 (currently amended): The method of claim 1, wherein the step ~~(b)~~(c) of generating the user interface~~top page user interface description~~ further includes the step[[s]] of associating a hyper-text link with the ~~device~~ information in each of said devices currently connected to the network, such that each hyper-text link provides access from the ~~top page~~ user interface ~~description~~ to the ~~device~~ information in an associated device.

Claim 5 (previously presented):   The method of claim 1, wherein said information in each device comprises an HTML page for user interaction with and/or control of that device.

Claim 6 (previously presented):   The method of claim 1, wherein the device information in each device includes device identification information for that device.

Claim 7 (canceled)

Claim 8 (currently amended): The method of claim [[1]]2, wherein ~~the step (b) further~~

~~includes the steps of generating the top page user interface description such that~~ each reference in the user interface includes at least one electronic link ~~each link in the top page user interface description provides~~providing direct access from the user interface to at least the user control interface description ~~in each associated device~~.

Claim 9 (currently amended): The method of claim 8, wherein ~~the step (b) further includes the steps of generating the top page user interface description such that~~ the user interface ~~top page user interface description further~~ includes device data corresponding to each device based on the information obtained from each device, ~~the device data providing one of the at least one electronic link to the user control interface description in each device,~~ and wherein ~~such that~~ when the one link in the ~~top page~~user interface is user activated the activated link is used to access the associated device and retrieve control interface description contained in the associated device to generate and display a device user interface based on the retrieved control interface description, for user interaction with that associated device.

Claim 10 (currently amended):   A network system for performing a service, comprising:

a physical layer providing~~, wherein the physical layer provides~~ a communication medium that can be used by connected devices to communicate with each other;

at least one of ~~or more of~~the connected devices storing ~~device~~information

~~including a user control interface description~~ for user interaction with <u>the at least one</u> ~~that~~ device;

   an agent in <u>the</u> at least one device for:

     (a) <u>discovering the plurality of devices that are currently connected to</u>

<u>the physical layer of the network;</u>

     ~~(a)~~<u>(b)</u> obtaining ~~the device~~ information <u>for commanding and controlling</u>

<u>at least one of the plurality of devices by at least one other device</u>~~directly from one~~

~~or more of the devices~~ currently connected to <u>the physical layer of</u> the network<u>,</u>

      <u>wherein the information includes at least a device name and service type;</u>

     ~~(b)~~<u>(c)</u> generating ~~dynamically~~ a <u>user interface</u> ~~top page user interface~~

~~description~~ based at least on the obtained ~~device~~ information, the <u>user interface</u>

~~top page user interface description~~ including one or more references associated

with ~~the device information in~~ each of <u>the</u> ~~said~~ devices <u>currently connected to the</u>

<u>network</u>~~, such that the reference includes at least one electronic link providing~~

~~direct access from the top page user interface description to said device~~

~~information contained in said devices~~; and

     ~~(c)~~<u>(d)</u> displaying <u>the generated user interface such that a user can</u> ~~when~~

~~one of the at least one electronic link in the top page user interface description is~~

~~selected by a user, using the selected link to access the control interface~~

~~description contained in the associated selected device to then generate a device~~

~~user interface for user interaction with that selected device~~<u>use each reference of</u>

the displayed user interface to access each device.

Claim 11 (currently amended):   The network system of claim 10 wherein ~~the agent~~ ~~generates the top page user interface description such that one of the at least one electronic link~~ ~~comprises a pointer from the top page user interface description to at least the device information~~ ~~in an associated device, wherein when one of the at least one electronic link in the top page user~~ ~~interface is selected by the user, the pointer directs the user to the URL that is linked to the~~ ~~associated device~~<u>the service type comprises a type of service that each device can provide and</u> <u>the user control interface is generated and displayed based on at least an attribute and capability</u> <u>of the service type</u>.

Claim 12 (currently amended):   The network system of claim 10, wherein the ~~agent~~ ~~generates the top page user interface description such that the top page user interface description~~ <u>user interface</u> further includes device data corresponding to each device based on the information obtained from each device.

Claim 13 (currently amended):   The network system of claim 10, wherein the agent further associates a hyper-text link in the ~~top page~~ user interface ~~description~~ with the ~~device~~ information in each of said devices currently connected to the network, such that each hyper-text link provides access from the ~~top page~~ user interface ~~description~~ to the ~~device~~ information in an

associated device.

Claim 14 (currently amended):   The network system of claim 10, wherein ~~said information in each device comprises an HTML page for user interaction with and/or control of that device~~each reference in the user interface includes at least one electronic link providing direct access from the user interface to at least the user control interface description.

Claim 15 (canceled)

Claim 16 (canceled)

Claim 17 (canceled)

Claim 18 (currently amended):   The network system of claim [[10]]11, wherein the agent generates the ~~top page~~ user interface ~~description~~ such that the ~~top page~~ user interface ~~description~~ further includes device data corresponding to each device based on the information obtained from each device, the device data providing ~~one of the~~ at least one electronic link to the user ~~control~~ interface ~~description~~ in each device, such that when the one link is user activated the activated link is used to access the associated device and retrieve control interface description contained in the associated device to generate and display a device user interface based on the

retrieved control interface associated for user interaction with that corresponding device.

Claim 19 (currently amended):   The network system of claim 10 further comprising

means for ~~generating at least one top page user interface by:~~ using each link in the ~~top page~~ user

interface ~~description~~ to access the ~~device~~ information in each associated device, and generating

the ~~top page~~ user interface including device data corresponding to each device using the accessed

information in each device.

Claim 20 (currently amended):   A network system for performing a service,

comprising:

a physical layer, wherein the physical layer provides a communication medium

than can be used by connected devices to communicate with each other;

multiple devices connected to the physical layer, one or more of <u>the</u> ~~said~~ multiple

devices storing ~~device~~ information ~~including a user control interface description~~ for user

interaction with that device, and one or more of <u>the</u> ~~said~~ multiple devices each including an agent

for:

    (a)   <u>discovering a plurality of devices that are currently connected to</u>

<u>the network in an autonomous manner;</u>

    ~~(a)~~<u>(b)</u>   obtaining information <u>for commanding and controlling at least one</u>

<u>of the plurality of devices by at least one other device</u> ~~directly from one or more of~~

~~the devices~~ currently connected to <u>the physical layer of</u> the network,

wherein <u>said</u> <u>the</u> information ~~including~~<u>includes</u> <u>at least a</u> device

~~information~~<u>name and service type</u>; ~~and~~

~~(b)~~<u>(c)</u>   generating ~~dynamically~~ a <u>user interface</u> ~~top page user interface~~

~~description~~ based at least on the obtained information, the <u>user interface</u> ~~top page~~

~~user interface description~~ including one or more references associated with ~~the~~

~~device information of~~ each of <u>the</u> ~~said~~ devices <u>currently connected to the network</u>~~,~~

~~such that the reference includes at least one electronic link providing direct access~~

~~from the top page user interface description to said device information contained~~

~~in said devices~~; and

~~(e)~~<u>(d)</u>   <u>displaying the generated user interface such that a user can</u>~~when~~

~~one of the at least one electronic link in the top page user interface description is~~

~~selected by a user, the selected link is used to access the control interface~~

~~description contained in the associated selected device to then generate a device~~

~~user interface for user interaction with that selected device~~<u>use each reference of</u>

<u>the displayed user interface to access each device</u>.

Claim 21 (currently amended):   The network system of claim 20, wherein ~~each~~

~~agent generates a top page user interface description such that one of the at least one electronic~~

~~link in the top page user interface description comprises a pointer from the top page user~~

~~interface description to at least the device information in an associated device, wherein when one~~

~~of the at least one electronic link in the top page user interface is selected by the user, the pointer~~

~~directs the user to the URL that is linked to the associated device~~the service type comprises a

type of service that each device can provide and the user control interface is generated and

displayed based on at least an attribute and capability of the service type.

Claim 22 (currently amended):   The network system of claim 20, wherein ~~each~~

~~agent generates a top page user interface description such that the top page~~ the user interface

~~description~~ further includes device data corresponding to each device based on the information

obtained from each device.

Claim 23 (currently amended):   The network system of claim 20, wherein each

agent further associates a hyper-text link in ~~a top page~~ the user interface ~~description~~ with the

~~device~~ information in each of said devices currently connected to the network, such that each

hyper-text link provides access from the ~~top page~~ user interface ~~description~~ to the ~~device~~

information in an associated device.

Claim 24 (currently amended):   The network system of claim 20, wherein ~~said~~

~~information in each device comprises an HTML page for user interaction with and/or control of~~

~~that device~~each reference in the user interface includes at least one electronic link providing

direct access from the user interface to at least the user control interface description.

        Claim 25 (canceled)

        Claim 26 (canceled)

        Claim 27 (canceled)

        Claim 28 (currently amended):   The network system of claim [[20]]21, wherein
each agent generates the ~~top page~~ user interface ~~description~~ such that the ~~top page~~ user interface
~~description~~ further includes device data corresponding to each device based on the information
obtained from each device, the device data providing a link to the user ~~control~~ interface
~~description~~ in each device, such that when the link is user activated the activated link is used to
access the associated device and retrieve control interface description contained in the associated
device to generate and display a device user interface based on the retrieved control interface
description, for user interaction with that associated device.